

ABSTRACT

A novel multivalent target binding protein which comprises a first and a second polypeptides and has at least three target binding sites is described. The first polypeptide of the multivalent target binding protein comprises a first scFv molecule and a first immunoglobulin-like domain which preferably comprises an immunoglobulin light chain variable region domain. The second polypeptide of the multivalent target binding protein comprises a second scFv molecule and a second immunoglobulin-like domain which preferably comprises an immunoglobulin heavy chain variable region domain. The first scFv molecule and the first immunoglobulin-like domain are preferably linked via a first extra amino acid sequence which preferably comprises an immunoglobulin light chain constant region domain. The second scFv molecule and the second immunoglobulin-like domain are preferably linked via a second extra amino acid sequence which preferably comprises an immunoglobulin heavy chain constant region domain. The first and second extra amino acid sequences preferably associate with each other via at least one disulfide bond. The multivalent target binding protein of the present invention is useful for treating and detecting tumors and infectious lesions.